

Carl Zeiss Meditec AG  
Attorney's File: PAT 9030/036-PCT

June 7, 2004  
K/22/kk

### Abstract

5 A device for determining a movement of an eye (1) arranged in front of said device comprises  
an illumination unit by means of which optical radiation can be generated and emitted as an  
illumination ray bundle (13, 13', 13'') for illumination of at least one area of the cornea (7) of the  
eye (1), a distance-determining unit (17), by means of which the illumination ray bundle (13, 13',  
13'') returned as a detection ray bundle (14, 14', 14'') by the cornea (7) can be received in a  
temporally resolved manner, and a distance signal corresponding to a distance of the cornea (7)  
10 from a reference plane (12, 12', 12'') can be generated using the received optical radiation of  
the detection ray bundle (14, 14', 14''), said reference plane (12, 12', 12'') being defined relative  
to the distance-determining unit (17), and an evaluating unit (11), by means of which a position  
or movement signal corresponding to a position or movement of the eye (1) can be generated  
using said distance signal.

15

Fig. 2

